What is claimed is:

1.   A method for transmitting data frames in a communications system comprising a transmitter and a receiver, comprising the steps of:

5   transmitting a data frame from said transmitter to said receiver; and

when said transmitter receives a request from the receiver for retransmission of said data frame, retransmitting said data frame to the receiver without transmitting a signaling message identifying said retransmitted data frame.

10   2.   A method as claimed in claim 1, further comprising the steps of:

receiving said retransmitted data frame at said receiver, and comparing said received retransmitted data frame to other data frames stored in a buffer; and

when a probability of a match between said received retransmitted data frame and one of said data frames in said buffer exceeds at least one predetermined threshold, said receiver

15   combines said received retransmitted data frame with the matching said one data frame.

3.   A method as claimed in claim 2, wherein when said probability is below any of said at least one predetermined threshold, said receiver performs the following steps:

storing in said buffer either said combined data frame, or said received retransmitted

20   and said matching data frame in the buffer, depending on which of said at least one threshold said probability is below; and

sending another retransmission request to said transmitter to request said transmitter to again retransmit said data frame.

25   4.   A method as claimed in claim 1, further comprising the steps of:

receiving said retransmitted data frame at said receiver;

comparing said received retransmitted data frame to other data frames stored in a buffer to-locate a potentially matching data frame which potentially matches said received retransmitted data frame, and to determine a probability of a match between said received

30   retransmitted data frame and said potentially matching data frame;

comparing said probability to a first threshold; and

when said probability is below said first threshold, storing said received retransmitted data frame in said buffer.

5.   A method as claimed in claim 4, wherein:

when said probability is below said first threshold, sending another retransmission request to said transmitter to request said transmitter to again retransmit said data frame.

6.   A method as claimed in claim 4, wherein:

when said probability is at or above said first threshold, combining said received retransmitted data frame with said potentially matching data frame to form a combined data frame.

7.   A method as claimed in claim 6, further comprising the steps of:

verifying a criteria of said combined data frame; and

when said criteria of said combined data frame is acceptable, deleting said potentially matching data frame from said buffer.

8.   A method as claimed in claim 6, further comprising the steps of:

verifying a criteria of said combined data frame; and

when said criteria of said combined data frame is unacceptable, comparing said probability to a second threshold.

9.   A method as claimed in claim 8, further comprising the steps of:

when said probability is above said second threshold, storing said combined data frame in said buffer; and

when said probability is below said second threshold, storing said received retransmitted data frame and said potentially matching data frame in said buffer.

10.   A method as claimed in claim 2, wherein:

said comparing step compares a Hamming distance between said received retransmitted data frame and said other data frames stored in said buffer to locate said

matching data frame.

11.   A computer readable medium of instructions for controlling a receiver of a communications system, comprising:

a first set of instructions, adapted to control said receiver to analyze a criteria of a received data frame and to transmit a request to said transmitter for retransmission of said data frame when said criteria is unacceptable;

a second set of instructions, adapted to control said receiver to compare said received retransmitted data frame to other data frames stored in a buffer to locate a potentially matching data frame and to determine a probability of a match between said received retransmitted data frame and said potentially matching data frame; and

a third set of instructions, adapted to control said receiver to combine said received retransmitted data frame with said potentially matching data frame when said probability exceeds at least one predetermined threshold.

12.   A computer readable medium of instructions as claimed in claim 11, further comprising:

a fourth set of instructions, adapted to control said receiver to perform the following steps when said probability is below any of said at least one predetermined threshold:

store in said buffer either said combined data frame, or said received retransmitted and said matching data frame in the buffer, depending on which of said at least one threshold said probability is below; and

send another retransmission request to said transmitter to request said transmitter to again retransmit said data frame.

13.   A communications system, comprising:

a transmitter, adapted to transmit a data frame; and

a receiver, adapted to receive said data frame and to send a request for retransmission of said data frame based on a criteria of said received data frame;

said transmitter being further adapted to retransmit said data frame to said receiver without transmitting a signaling message identifying said retransmitted data frame in response

to said request.

14. A communications system as claimed in claim 13, wherein:

said receiver is adapted to receive said retransmitted data frame, and to compare said received retransmitted data frame to other data frames stored in a buffer; and

when a probability of a match between said received retransmitted data frame and one of said data frames in said buffer exceeds at least one predetermined threshold, said receiver combines said received retransmitted data frame with the matching said one data frame.

15. A communications system as claimed in claim 14, wherein said receiver is further adapted to perform the following operations when said probability is below any of said at least one predetermined threshold:

storing in said buffer either said combined data frame, or said received retransmitted and said matching data frame in the buffer, depending on which of said at least one threshold said probability is below; and

sending another retransmission request to said transmitter to request said transmitter to again retransmit said data frame.